



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/204,706	12/03/98	RAMACHANDRAN	98-P-7501-US

IM22/0411
THE LAW OFFICE OF JEROME J NORRIS
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EXAMINER
OLSEN, A

ART UNIT	PAPER NUMBER
1746	

DATE MAILED: 04/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/204,706

Applicant(s)
Ramachandran

Examiner
Allan Olsen

Group Art Unit
1746



☒ Responsive to communication(s) filed on Feb 7, 2001

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 13-17 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 13-17 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 1746

DETAILED ACTION

Continued Prosecution Application

1. The request filed on for a Divisional Application based on parent Application No. 09204,706 is acceptable and a divisional application has been established. An action on the divisional application follows.

Specification

2. The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph. The form and legal phraseology often used in patent claims should be avoided Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claim 13 is objected to because in line 9 the phrase "on which" should be --in which--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1746

5. Claims 13-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13-17 are said to be apparatus claims, however the claims read as though they are method claims, therefore it is not clear what class of subject matter Applicant intends to claim. It is noted that Applicant has already received a patent on the method and given that Applicant indicated that the instant claims are directed to the nonelected invention of original apparatus claims 11-12. Therefore, the claims are being treated as apparatus claims and as such, limitations directed to method steps were given no patentable weight except for indicating that which the claimed apparatus must be capable of performing.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent 5,545,289 issued to Chen et al. (hereinafter, Chen).

Art Unit: 1746

Chen teaches a RIE metal etching apparatus. The etching chamber of Chen meets the limitation of supplying a mixture of an etching gas and an acid neutralizing gas into a vacuum chamber [in] which the structure is supported because, in terms of apparatus limitations, this limitation is considered to require an apparatus having a vacuum chamber with a gas supply line and a substrate support. Chen teaches a separate plasma which would be capable of forming a water-only plasma. The temperature of the substrate with in the separate chamber is capable of being heated to a temperature above 200° C. The temperature may also be controlled and held between 175°C - 200°C. The separate chamber of Chen also meets the limitation of claim 16 as this a vacuum chamber with gas supply means. The separate chamber includes substrate heaters and a remote microwave plasma source. Therefore, the apparatus is capable of performing a down-stream, chemical etching process upon a substrate that is heated above 200°C. See column 5, lines 40-67; column 8, lines 36-48 and 5-59; column 12, lines 1-10.

8. Claims 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,816,098 issued to Davis et al. (hereinafter, Davis).

Davis teaches a multi-chamber apparatus. The vacuum chambers of Davis include: gas supply lines; remote plasma generation means; substrate heating means; and substrate temperature controlling means. Because of the presence of these features, the apparatus of Davis is capable of performing the method limitations set forth in claims 13-17. See column 60, lines 34-54; column 44, lines 33-47.

Art Unit: 1746

Conclusion

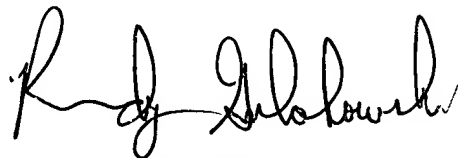
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allan Olsen whose telephone number is (703) 306-9075. The examiner can normally be reached on Monday through Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (703) 308-4333. The fax phone number for this Group is (703) 305-7719.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Allan Olsen, Ph.D.

April 3, 2001


RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700